

Abstract of the disclosure

An amorphous silicon film is formed on a flat glass substrate, and then crystallized by heating to obtain a crystalline silicon film. The glass substrate is placed on a stage having a convex U-shaped curved surface. The glass substrate is heated for a desired period of time at a temperature close to a strain point of the glass substrate, and then is cooled. Also, an amorphous silicon film formed on a glass substrate is crystallized into a crystalline silicon film by heating and then the glass substrate is mounted on a stage having a flat surface in such a manner that the lower surface of the glass substrate is in close contact with the flat surface of the stage by pressing the upper surface of the glass substrate. Then, a linear laser beam is irradiated on the crystalline silicon film in a scanning manner.

A liquid crystal display device is manufactured by first forming a crystalline semiconductor film 2103 of silicon for example, over an insulating substrate 2101, such as glass. The substrate is warped in the process. The warpage is corrected to about 5 μm by suction against a stage 2201. The film crystallinity is enhanced by scanning with a linear laser beam.

DLL
10/16/99

DLL
3/23/00